

REMARKS

Claims 1-18 are pending in the present application. Claim 18 has been allowed. Claims 1-17 have been rejected.

Applicants would like to gratefully acknowledge the indication by the Examiner that claim 18 has been allowed.

Claims 1-6, 9-11 and 13-17 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent Publication No. 2003/0174782 A1 ("Papadias") in view of U.S. Patent No. 6,584,593 B1 ("Seshadri"). Applicants respectfully traverse the rejection as set forth below.

Claim 1 recites "encoding a stream of data according to a turbo *multiple trellis coded* modulation scheme" (italics added).

Applicants respectfully submit that neither Papadias nor Seshadri, individually or combined, fairly teaches turbo multiple trellis coded modulation scheme as set forth in claim 1.

In the Office Action, it is evident that Papadias does not teach turbo multiple trellis coded modulation.

In the Office Action, it is also evident that Seshadri does not teach turbo multiple trellis coded modulation.

If neither Papadias nor Seshadri teaches turbo multiple trellis coded modulation, then the combination does not teach turbo multiple trellis coded modulation either.

The term "multiple" in "multiple trellis coded modulation scheme" does not modify "modulation". The term "multiple" in "multiple trellis coded modulation scheme" modifies "trellis". Neither Papadias nor Seshadri teaches a *multiple trellis coding*.

Applicants respectfully submit that the conclusion stated in the Office Action is error. The Office Action alleges that "implementing the inner coding with turbo trellis coded modulation scheme in each encoder/mapper of Papadias (135-1 ~ 135-4), hence produces a turbo multiple trellis coded modulation scheme". Office Action at page 4.

No, it does not. Even if the inner coding with turbo trellis coded modulation scheme alleged to be in Seshadri is implemented in each encoder/mapper of Papadias as alleged in the Office Action, the result is not a turbo multiple trellis coded modulation scheme because the encoder/mapper of Papadias is not performing multiple trellis coding.

Thus, even if the teachings of Seshadri and Papadrias are combined as described at page 4 of the Office Action, each and every element as set forth in claim 1 is still not taught.

For at least the above reasons, it is respectfully requested that the obviousness rejection based on Papadrias and Seshadri be withdrawn with respect to claim 1 and its rejected dependent claims (i.e., claims 2-5).

Claim 6 recites "an outer encoder configured to encode a stream of data according to a turbo multiple trellis coded modulation scheme".

Claim 13 recites "channel encoding means for encoding a stream of data according to a turbo multiple trellis coded modulation scheme".

Claims 16 recites "encoding a stream of data according to a turbo multiple trellis coded modulation scheme".

Claim 17 recites "an outer encoder configured to encode a stream of data according to a turbo multiple trellis coded modulation scheme".

Since the rejection of claims 6, 13, 16 and 17 is based, at least in part, on Papadrias and Seshadri, the same or similar arguments made with respect to claim 1 are also made, if appropriate, with respect to claims 6, 13, 16 and 17.

For at least the above reasons, it is respectfully requested that the rejection be withdrawn with respect to claims 6, 13, 16 and 17 and their rejected dependent claims (i.e., claims 7-12, 14 and 15).

Applicants also respectfully request that the Examiner reconsider the use of Seshadri as a basis for an obviousness rejection. In the Appeal Brief that was deemed persuasive, Applicants made a number of arguments and provided evidence from Seshadri that now can be used to demonstrate that Seshadri teaches away from, for example, the claimed invention as set forth in claim 1 and that Seshadri teaches away from Papadrias.

For at least the above reasons, it is respectfully submitted that Seshadri should not serve as a basis for an obviousness rejection with respect to claims 1-17.

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-18 are in condition for allowance. If anything remains in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

U.S. Application No. 10/606,924, filed June 26, 2003


Response dated December 20, 2006

In Reply to Office Action mailed September 20, 2006

The Commissioner is hereby authorized to charge any additional fees, any fee deficiencies and to credit any overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Dated: December 20, 2006

Respectfully submitted,



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